

**IN THE CLAIMS:**

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) A method for performing IP telephony, comprising:  
registering a first Media Gateway with a Media Gateway Controller, wherein said registering the first Media Gateway comprises receiving and storing the public IP address of the first Media Gateway;  
registering a second Media Gateway with the Media Gateway Controller, wherein said registering the second Media Gateway comprises receiving and storing the public IP address of the second Media Gateway;  
the Media Gateway Controller receiving a Call Setup request, wherein the Call Setup request comprises a source IP address and a destination telephone number;  
the Media Gateway Controller selecting [[a]] the first Media Gateway based on the source IP address;  
the Media Gateway Controller selecting [[a]] the second Media Gateway based on the destination telephone number;  
the Media Gateway Controller comparing a public IP address of the first Media Gateway to a public IP address of the second Media Gateway;  
if the public IP address of the first Media Gateway is the same as the public IP address of the second Media Gateway, the Media Gateway Controller selecting a private IP address of the first Media Gateway and a private IP address of the second Media Gateway for Call Setup; and  
if the public IP address of the first Media Gateway is not the same as the public IP address of the second Media Gateway, the Media Gateway Controller selecting the public IP address of the first Media Gateway and the public IP address of the second Media Gateway for Call Setup.

2. (Original) The method of claim 1, further comprising:

sending the selected IP address of the first Media Gateway to the second Media Gateway; and

sending the selected IP address of the second Media Gateway to the first Media Gateway.

3. (Original) The method of claim 2, further comprising:

the first Media Gateway sending data to the second Media Gateway using the selected IP address of the second Media Gateway; and

the second Media Gateway sending data to the first Media Gateway using the selected IP address of the first Media Gateway.

4. (Cancelled)

5. (Original) The method of claim 4, wherein said registering the first Media Gateway further comprises receiving and storing a private IP address of the first Media Gateway.

6. (Original) The method of claim 4, wherein said registering the second Media Gateway further comprises receiving and storing a private IP address of the second Media Gateway.

7. (Original) The method of claim 1, wherein the first Media Gateway and the second Media Gateway each comprise one of an IP telephone or a Trunking Gateway, wherein the Trunking Gateway comprises an interface to the Public Switched Telephone Network (PSTN).

8. (Currently Amended) A system for performing IP telephony, comprising:

a network;

a first Media Gateway;

a second Media Gateway, wherein the second Media Gateway is operable to couple to the first Media Gateway through the network; and

a Media Gateway Controller, wherein the Media Gateway Controller is operable to couple to the first Media Gateway and the second Media Gateway through the network;

wherein the Media Gateway Controller is operable to:

register the first Media Gateway, wherein, in registering the first Media Gateway the Media Gateway Controller is operable to receive and store the public IP address of the first Media Gateway; and

register the second Media Gateway, wherein, in registering the second Media Gateway the Media Gateway Controller is operable to receive and store the public IP address of the second Media Gateway;

wherein the first Media Gateway is operable to send a Call Setup request to the Media Gateway Controller, wherein the Call Setup request comprises a source IP address and a destination telephone number;

wherein the Media Gateway Controller is operable to:

receive a Call Setup request;

select [[a]] the first Media Gateway based on the source IP address;

select [[a]] the second Media Gateway based on the destination telephone number;

compare a public IP address of the first Media Gateway to a public IP address of the second Media Gateway;

if the public IP address of the first Media Gateway is the same as the public IP address of the second Media Gateway, select a private IP address of the first Media Gateway and a private IP address of the second Media Gateway for Call Setup; and

if the public IP address of the first Media Gateway is not the same as the public IP address of the second Media Gateway, select the public IP address of the first Media Gateway and the public IP address of the second Media Gateway for Call Setup.

9. (Original) The system of claim 8, wherein the Media Gateway Controller is further operable to:

send the selected IP address of the first Media Gateway to the second Media Gateway; and

send the selected IP address of the second Media Gateway to the first Media Gateway.

10. (Original) The system of claim 9,

wherein the first Media Gateway is operable to send data to the second Media Gateway using the selected IP address of the second Media Gateway; and

wherein the second Media Gateway is operable to send data to the first Media Gateway using the selected IP address of the first Media Gateway.

11. (Cancelled)

12. (Original) The system of claim 11, wherein, in registering the first Media Gateway the Media Gateway Controller is further operable to receive and store a private IP address of the first Media Gateway.

13. (Original) The system of claim 11, wherein, in registering the second Media Gateway the Media Gateway Controller is further operable to receive and store a private IP address of the second Media Gateway.

14. (Original) The system of claim 8, wherein the first Media Gateway and the second Media Gateway each comprise one of an IP telephone or a Trunking Gateway, wherein the Trunking Gateway comprises an interface to the Public Switched Telephone Network (PSTN).

15. (Currently Amended) A memory medium, wherein the memory medium stores program instructions which are executable to perform:

registering a first Media Gateway, wherein said registering the first Media Gateway comprises receiving and storing the public IP address of the first Media Gateway;

registering a second Media Gateway with the Media Gateway Controller, wherein said registering the second Media Gateway comprises receiving and storing the public IP address of the second Media Gateway;

receiving a Call Setup request, wherein the Call Setup request comprises a source IP address and a destination telephone number;

selecting [[a]] the first Media Gateway based on the source IP address;

selecting [[a]] the second Media Gateway based on the destination telephone number;

comparing a public IP address of the first Media Gateway to a public IP address of the second Media Gateway;

if the public IP address of the first Media Gateway is the same as the public IP address of the second Media Gateway, selecting a private IP address of the first Media Gateway and a private IP address of the second Media Gateway for Call Setup; and

if the public IP address of the first Media Gateway is not the same as the public IP address of the second Media Gateway, selecting the public IP address of the first Media Gateway and the public IP address of the second Media Gateway for Call Setup.

16. (Original) The memory medium of claim 15, wherein the program instructions are further executable to perform:

sending the selected IP address of the first Media Gateway to the second Media Gateway; and

sending the selected IP address of the second Media Gateway to the first Media Gateway.

17. (Original) The memory medium of claim 16,

wherein the selected IP address of the second Media Gateway is useable by the first Media Gateway to send data to the second Media Gateway; and

wherein the selected IP address of the first Media Gateway is useable by the second Media Gateway to send data to the first Media Gateway.

18. (Cancelled)

19. (Original) The memory medium of claim 18, wherein said registering the first Media Gateway further comprises receiving and storing a private IP address of the first Media Gateway.

20. (Original) The memory medium of claim 18, wherein said registering the second Media Gateway further comprises receiving and storing a private IP address of the second Media Gateway.

21. (Original) The memory medium of claim 15, wherein the first Media Gateway and the second Media Gateway each comprise one of an IP telephone or a Trunking Gateway, wherein the Trunking Gateway comprises an interface to the Public Switched Telephone Network (PSTN).